



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/753,867	01/08/2004	Nicholas Jackson JR.	46536-0002	6131

35161 7590 01/04/2005

DICKINSON WRIGHT PLLC
1901 L. STREET NW
SUITE 800
WASHINGTON, DC 20036

EXAMINER

SHARP, JEFFREY ANDREW

ART UNIT	PAPER NUMBER
----------	--------------

3677

DATE MAILED: 01/04/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/753,867	Applicant(s) JACKSON, NICHOLAS	
	Examiner Jeffrey Sharp	Art Unit 3677	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 January 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 July 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Status of Claims

- [1] Claims 1-20 are pending.

Claim Objections

- [2] Claims 5 and 9 objected to because of the following informalities:

Claim 5 line 4, '*and disposed*' should be --being disposed--.

Claim 9 is objected to, because it is not clear whether there are one or two cams.

Applicant is urged to suggest that '**said** cam is located on the inner member'. This makes clear that the cam of claim 9 refers to the same cam presented in claim 1. If this is not the case, Applicant is urged to re-name the cam of claim 9 to 'second cam' to clearly distinguish it from the cam of claim 1.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

- [3] The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an

Art Unit: 3677

international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

[4] Claims 1-11, and 13-20 are rejected under 35 U.S.C. 102(e) as being anticipated by Heflin et al. US-6,652,206.

Heflin et al. disclose substantially all of the limitations set forth in the claims disclosed by Applicant, except for a second releasable locking mechanism.

As for claim 7, the edge portion of recess (38) could be used as a notch for removal of the fastener.

[5] Claims 1-8, 11, 13, 14, 16, 18, and 19 are rejected under 35 U.S.C. 102(b) as being anticipated by Nakanishi US-5,509,182.

Nakanishi teaches:

- 1) outer member (1)
- 2) inner member (12) integral with the outer member
- 3) cavity within outer member
- 4) cam (body 13 has a cam surface that could displace the outer member outwardly and into a coupled position, i.e. given an undersized panel aperture).
- 5) insertion tip (16)
- 6) sleeve head (2)
- 7) intermediate portion/member (4)
- 8) first section (between 5 and upper 11)

Art Unit: 3677

- 9) second section (between 5 and lower 11)
- 10) first living hinge (5)
- 11) second living hinge (lower 11)
- 12) uncoupled/coupled positions
- 13) common longitudinal axis
- 14) sleeve head recess (cavity within 8 and 9)
- 15) shank head (upper 12) received in the sleeve head recess in a coupled position
- 16) notch (slots between 9 and 8 on head (2) could be used to permit pryable
release of outer and inner members)
- 17) sleeve seat and shank seat (flat portions of 9 and 12 are aligned in a common
plane in a coupled position)
- 18) first releasable locking mechanism (9 integral with 12 in a coupled position)
- 19) upper projection (barb portion of 12)
- 20) upper recess (portion of cavity within 8 and 9)
- 21) coupling mechanism (9 integral with 12 in a coupled position)

See also, Barnett US-4,564,163 and Kikuchi 4,840,334.

- 22) angled surface (upper portion of barb portion of 12)

Although not mentioned in claims 1-8, 11, 13, 14, 16, 18, and 19, Nakanishi also shows the *first arm*, *second arm*, and *cam surface* limitations of claim 10 and 15.

[6] Claims 5, 8, 11, and 13-18 are rejected under 35 U.S.C. 102(b) as being anticipated by Grittner et al. US-4,122,583.

Art Unit: 3677

Grittner et al. teach:

- 1) uncoupled/coupled positions (Figures 1 and 2, respectively)
- 2) outer member
- 3) cavity within outer member
- 4) inner member integral with the outer member
- 5) first releasable locking mechanism (16 combo 17)
- 6) sleeve head (5)
- 7) insertion tip (19)
- 8) intermediate portion/member (9 combo 11)
- 9) first section (around 9 -- between 10 and 16)
- 10) second section (around 11 -- between 12 and 10)
- 11) first living hinge (10)
- 12) second living hinge (12)
- 13) first arm operatively engaging the inner member (inside 11)
- 14) second arm operatively engaging the inner member (inside 11)
- 15) one piece injection molding (see web 7 in Figure 1)
- 16) coupling mechanism (2)

See also, Barnett US-4,564,163 and Kikuchi 4,840,334.

- 17) shank seat (bottom edge of 8)
- 18) sleeve seat (bottom edge of 5)

As for claim 8, the shank and sleeve seat are coplanar in a coupled position.

Art Unit: 3677

[7] Claims 1-5, 9-11, 13-16, and 18 are rejected under 35 U.S.C. 102(b) as being anticipated by Palmer et al. US-4,312,614.

Palmer teaches:

- 1) upper/lower projections (26) on the outer member (2)
- 2) upper recess (25) on the inner member (1)
- 3) cam (13) on the inner member that engages and outwardly forces first and second arms (29).
- 4) first (end of 30 near outer member 2) and second (end of 30 near inner member 1) living hinges
- 5) the shank seat (bottom of 11) of the inner member (1) and sleeve seat (28) of the outer member (2) are flush in a coupled position (Col 3 lines 26-30).

[8] Claims 1-6, 8, 9, 10, 11, 13, 14, 15, 16, 18, and 19 are rejected under 35 U.S.C. 102(b) as being anticipated by LLauge US-4,318,650.

LLauge teaches cams (10) each having angled surfaces. The angled surfaces inherently create recesses that are adapted to receive upper projections (4). The head (upper 8) of the inner member (8) is configured to fit within a recess (3) in the head (2) of an outer member. The outer member has first and second living hinges (near 7, bottom of 12) that facilitate expansion of the outer member. The inner member is driven upward into a coupled position from an uncoupled position. As the cams engage upper projections (4), first and second arms of the intermediate portion/member (7,12) are expanded and move outward radially from the longitudinal axis.

See also, Anscher US-4,089,248 and Iguchi US-4,920,618.

Claim Rejections - 35 USC § 103

[9] The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

[10] Claim 12 rejected under 35 U.S.C. 103(a) as being unpatentable over Palmer et al. US-4,312,14 in view of Meyer US-5,775,860.

Palmer et al. teach all the limitations of the instant claim 11.

However, Palmer et al. fail to disclose expressly a second releasable locking mechanism comprising a lower recess and projection.

Meyer teaches upper (66) and lower (58) projections that engage upper and lower recesses in a coupled position, satisfying the limitations 'first and second releasable locking mechanisms'.

At the time of invention, it would have been obvious to one of ordinary skill in the art to modify either of the inner or outer members taught by Palmer et al., to include a second releasable locking mechanism (i.e., an extra set of lower projections and recesses) as suggested by Meyer, in order to more securely couple the inner and outer member together.

[11] Claim 12 also rejected under 35 U.S.C. 103(a) as being unpatentable over Heflin et al. US-6,652,206 in view of Meyer US-5,775,860.

Art Unit: 3677

Heflin et al. teaches:

However, Heflin et al. fail to disclose expressly a second releasable locking mechanism having a projection on either the inner or outer member and a complimentary recess.

Meyer teaches upper (66) and lower (58) projections that engage upper and lower recesses in a coupled position, satisfying the limitations 'first and second releasable locking mechanisms'.

At the time of invention, it would have been obvious to one of ordinary skill in the art to modify either of the inner or outer members taught by Heflin et al., to include a second releasable locking mechanism (i.e., an extra set of lower or upper projections and recesses) as suggested by Meyer, in order to more securely couple the inner and outer member together.

Conclusion

[12] The prior art made of record and not relied upon is considered pertinent to applicant's disclosure is as follows:

US 3074134 A	USPAT	BUECHLER WILLIAM R
US 4089248 A	USPAT	Anscher; Bernard
US 4564163 A	USPAT	Barnett; Barry R. M.
US 4902182 A	USPAT	Lewis; Jeffrey C.
US 4920618 A	USPAT	Iguchi; Tatsuya
US 4973212 A	USPAT	Jacobs; David
US 5393185 A	USPAT	Duffy, Jr.; William J.
US 5511283 A	USPAT	Hirose; Akihiko
US 5672438 A	USPAT	Banerjee; Shoibal et al.
US 5775859 A	USPAT	Anscher; Joseph
US 5797714 A	USPAT	Oddenino; Manrico
US 6287043 B1	USPAT	Kraus; Willibald
US 6368009 B1	USPAT	Noda; Nobuhisa
US 6634840 B1	USPAT	Salmon; Bertrand et al.
US 6659701 B1	USPAT	Risdale; Marc R.
US 6804864 B2	USPAT	Kirchen; James T. et al.

Art Unit: 3677


US 20040181917 A1	US-PGPUB	Sawatani, Seiji
US 5871320 A	USPAT	Kovac; Zdravko
US 5630256 A	USPAT	Kanno; Yoshikazu
US 4780037 A	USPAT	Payne; Sidney H.
US 4716633 A	USPAT	Rizo; Leandre
US 3417438 A	USPAT	SCHUPLIN JEROME T
US 3350976 A	USPAT	TOPF SAM B
US 3701373 A	USPAT	Wronke; Louis J. et al.
US 3481242 A	USPAT	TOPF SAMUEL B
US 3130822 A	USPAT	MEYER ENGELBERT A

[13] Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeffrey Sharp whose telephone number is (703) 305-0426. The examiner can normally be reached on 7:30 am - 5:00 pm Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, J.J. Swann can be reached on (703) 306-4115. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JAS


JACK LAVINDER
Primary Patent Examiner
TECHNOLOGY CENTER 3600

1/3/05